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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,652	06/24/2003	Masatoshi Yokota	0754-0192P	1286
2292	7590	11/04/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			HUNTER, ALVIN A	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,652

Applicant(s)

YOKOTA, MASATOSHI

Examiner

Alvin A. Hunter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,9 and 11-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Claims 1, 2, 4, 6, 7, and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (USPN 5908358) in view of Wu (6210294).

Wu '358 discloses a thermosetting urethane golf ball cover wherein the thermosetting urethane resin composition comprises an isocyanate group-terminated urethane prepolymer and a polyamine compound', covering a core having a Young's modulus, also known as modulus of elasticity or stiffness modulus, from about 5000 to 100000 psi, or 34.5 to 689.5 Mpa (See claim 1 of Wu '358). In table 1, Wu '358 shows examples of golf balls in which bear the cover of the present invention wherein it is shown that the covers have a hardness of 51 to 58 Shore D. From the above, a modulus of at least 102 to 116 would satisfy the applicant's criteria, and therefore, would anticipate the above claims. Wu '358 discloses that the types of polyurethane that may be used are of thermoplastic and thermoset type in which examples of how those types are made. Wu '358 does limit the polyurethane to having the types of isocyanates disclosed. Wu '358 also established that alicyclic isocyanates, which inherently has color stabilizing characteristics, may be used to produce thermoset polyurethane (See

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Column 5, lines 39 through 50). Wu '294 discloses a polyurethane composition have dicyclohexylmethane diisocyanates and isophorone diisocyanate (See Summary of the invention). One having ordinary skill in the art would have found it obvious to use the above isocyanates within Wu '358 in order to increase the initial velocity of the golf ball.

Response to Arguments

Applicant's arguments filed 5/17/05 and 4/14/05 have been fully considered but they are not persuasive. Applicant argues with respect to claims 1 and 6 that the prior does not establish prima-facie obviousness because of the inclusion of epoxy within the composition materially affects the invention. The examiner disagrees. Applicant uses the transitional phrase "consisting essentially of" in the context of "comprising" when referring to the urethane resin. The instant invention is geared to having better durability than an ionomer covered golf ball and having the feel of a balata covered golf ball. It has been well establish that polyurethane covers produce these characteristics. The only thing that would make Wu '358 teach away from "consisting essentially of" is if the epoxy material effect the basic novel characteristic of the polyurethane.

Polyurethane inherently has abrasion and wear resistant properties. The inclusion of the epoxy does not deter from these basis and novel characteristics because the polyurethane still technically has abrasion and wear resistant properties. The epoxy compound is nothing more than a curing agent. Wu '358 notes that the invention may be made of a polyurethane prepolymer with a polyamine curing agent or a bifunctional glycol and epoxy curing agent (See Column 6, lines 15 through 19). Wu '358 implies that the same result may be obtained even without using the epoxy curing agent.

In reference to the stiffness and hardness ratio, the relationship is nothing more than routine optimization. The stiffness and hardness is nothing more than a result of the combination of materials used above.

In reference to the Wu '358 not disclosing the diisocyanates, the applicant has deterred from the a whole theory when making the argument. Wu '358 notes that disclosed examples isocyanates used to form commonly known polyurethanes but does not necessarily limite the diisocyanates to thoses disclosed, which is why Wu '294 was used in combination with Wu' 294. Wu '358 inherently implies that the polyurethane has a diisocyanate but does not limit the type of diisocyanate. For these reasons, the above office action has been furnished.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsui et al. (USPN 3830785) discloses the use of a thermosetting urethane having blocked cyclo-aliphatic diisocyanates for the usage of coating substrates.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is (571) 272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim, can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAH

Alvin A. Hunter, Jr.



EUGENE KIM
PRIMARY EXAMINER